

At page 5, please replace paragraph [0033] with new paragraph [0033], a clean form of which is shown below, having the underlined additions and bracketed deletions as shown in the attached Marked-Up Version of the Specification:

B2

- -[0033] It should be noted that though figs. 2-5 show a cable provided with an outer sheath G, what said above also applies to the above-mentioned case of a cable provided with the individual sheaths P only. Furthermore, it is clear that shapes, sizes and materials of the above-described elements (in particular of tubes N, L) may freely change according to the specific needs of the application for which the probe is intended. For example, the inner material (N'; L') of a two-layer tube could also be not compatible with material M, since it is sufficient to have the compatibility of the outer material (N'; L') enclosing it.

At pages 2-3, please delete, without prejudice, paragraphs [0010], [0011], [0012], [0013], [0014], [0015] and [0016]. Also, at pages 5-7, please delete, without prejudice, paragraphs [0034], [0035], [0036], [0037], [0038], [0039], [0040] and [0041].

REMARKS

Claims 1-9 are presently pending in the application.

The Applicant has identified a typographical error in the Substitute Specification filed as part of the Preliminary Amendment on December 5, 2001. Specifically, paragraphs [0001] through, and including, the first two sentences of paragraph [0009] were mistakenly repeated in the last sentence of paragraph [0009] through, and including, paragraph [0016], respectively. Also, paragraphs [0025] through, and including, the first three sentences of paragraph [0033] were mistakenly repeated in the last sentence of paragraph [0033] through, and including, paragraph [0041], respectively. By this amendment, paragraph [0009] has been replaced with a new paragraph [0009] which does not include the last sentence of original paragraph [0009], and paragraphs [0010] through, and including, paragraph [0016] have been deleted. Also by this amendment, paragraph [0033] has been replaced with a new paragraph [0033] which does not include the last sentence of original paragraph [0033], and paragraphs [0034] through, and including, paragraph [0041] have been deleted.

In the Office Action, the Examiner has required an election of species among the claims of Group I (claims 1-4), drawn to a method of making a temperature probe, allegedly

classified in Class 29, Subclass 612, and the claims of Group II (claims 5-9), drawn to the temperature probe, allegedly classified in Class 338, Subclass 28. The Examiner takes the position that the inventions of Groups I and II are related as a process of making and a product made, and that the inventions are distinct because the product can be made by a materially different process such as by not using a covering element preceding the overmoulding but by covering thereafter. This restriction requirement is respectfully, but strenuously, traversed for the reasons set forth in detail below.

Traversal of Requirement

The present invention provides a sealed temperature probe in which a covering element is fused to a thermoplastic material to form a single body (see, e.g., page 4, ¶¶ 25-26). Reliable operation of the probe requires a sensor in the probe to be adequately insulated from the environment (page 1, ¶ 3). To accomplish this, a terminal where conducting wires are soldered to the sensor must be sealed onto an insulating cable in order to obtain continuity of insulation (page 1, ¶ 3). A novel aspect of the manufacture of the probe is the introduction of a sensor into the covering element prior to a final overmoulding step where the covering element is then fused to the thermoplastic material (page 4, ¶ 26). By introducing the sensor into the covering element before the overmoulding step, the method of the present invention assures that the terminal is properly sealed and that a required minimum thickness of insulating material covers the sensor in the probe (page 3, ¶¶ 17 and 26).

As such, Applicant respectfully, but strenuously, disagrees with the Examiner's assertion that "the product can be made by a materially different process such as by not using a covering element preceding the overmoulding but by covering thereafter for example." The Examiner's proposed process would make it impossible to fuse the covering element to the thermoplastic material in a manner that achieves a properly sealed terminal and a required minimum thickness of insulating material covering the sensor. Moreover, it would be practically impossible to obtain the first embodiment of the invention by such a process since the outer sheath could not be pushed forward over the moulded material (see page 4, ¶ 26 and Fig. 1).

Finally, the Examiner would not be unduly burdened in his search, as a search for the particular temperature probe will likely encompass references drawn to a method of making such temperature probes. Accordingly, reconsideration and withdrawal of the restriction requirement are respectfully requested.

Provisional Election

In the event that the Examiner maintains the restriction requirement, the Applicant hereby provisionally elects claims 1-4 (Group I) drawn to a method of making a temperature probe.

The Examiner is respectfully requested to contact the undersigned on any questions which might arise at the telephone number indicated below. Reconsideration and an early examination of the claims are respectfully requested.

Respectfully submitted,

MARIO NOLI

11/13/02

(Date)

By:



WILLIAM C. YOUNGBLOOD

Registration No. 50,524

AKIN GUMP STRAUSS HAUER & FELD L.L.P.

One Commerce Square

2005 Market Street - 22nd Floor

Philadelphia, PA 19103-7086

Telephone: (215) 965-1200

Direct Dial: (215) 965-1246

Facsimile: (215) 965-1210

E-Mail: wyoungblood@akingump.com

WWS/WY/hg

Marked-Up Version of the Specification

Page 2, Paragraph [0009]:

--[0009] A further drawback stems from the fact that in order to obtain a double insulation with two layers of different material and/or colour it is necessary to carry out a double moulding. This obviously implies higher costs and a further increase in diameter. [The present invention relates to temperature probes of electric type, and in particular to a method of manufacturing a sealed probe as well as to a probe manufactured according to this method]- -

Page 5, Paragraph [0033]:

--[0033] It should be noted that though figs. 2-5 show a cable provided with an outer sheath G, what said above also applies to the above-mentioned case of a cable provided with the individual sheaths P only. Furthermore, it is clear that shapes, sizes and materials of the above-described elements (in particular of tubes N, L) may freely change according to the specific needs of the application for which the probe is intended. For example, the inner material (N'; L'') of a two-layer tube could also be not compatible with material M, since it is sufficient to have the compatibility of the outer material (N'; L') enclosing it. [With reference to said figures, there is seen that a probe according to the invention conventionally includes a cable C provided with an outer insulating sheath G which encloses at least a pair of conducting wires F, insulated in turn by respective inner sheaths P, which end with an exposed length where a sensor is soldered.] - -